

Polyclonal Antibody to Alcohol Oxidase - Purified

Alternate names: AOD1, AOX, MOX, Methanol Oxidase

Catalog No.: AP20103PU-N

Quantity: 1 mg

Concentration: 2.0 mg/ml

Background: Alcohol Oxidase (AOX) is a homooctameric flavoprotein consisting of eight identical subunits of ~74 kD, each containing a flavin adenine dinucleotide molecule (FAD) as a prosthetic group (van der Klei et al., 1991). The protein catalyzes the oxidation of methanol to formaldehyde and hydrogen peroxide, the first step in the methanol utilization pathway of certain yeasts including *Pichia pastoris*, *Hansenula polymorpha*, and *Candida boidinii* (van der Klei et al., 1991). AOX is normally localized in the matrix of single membrane-bound organelles called peroxisomes. During methanol growth, the peroxisomes also contain large amounts of dihydroxyacetone synthase, the first enzyme in the methanol assimilatory pathway, and catalase (CAT), which converts the hydrogen peroxide generated by oxidases such as AOX into water and oxygen (Veenhuis and Harder, 1991). As a result, peroxisomes, which are small and few in number in glucose-grown cells, are massively induced in methanol-grown cells (Veenhuis and Harder, 1991).

Uniprot ID: [Q00922](#)

NCBI: [5477](#)

Host / Isotype: Rabbit / IgG

Immunogen: Alcohol oxidase isolated and purified from *Candida boidinii*. Freund's complete adjuvant is used in the first step of the immunization procedure.

Format: **State:** Lyophilized purified IgG fraction
Purification: Solid Phase Affinity Chromatography
Buffer System: PBS, pH 7.2 stabilized with Dextran without preservatives and foreign proteins
Reconstitution: Restore by adding 0.5 ml of sterile distilled water

Applications: This product is intended for use in precipitating and non-precipitating antibody-binding assays such as e.g., ELISA and Western blotting and Immunofluorescence or Histochemical techniques, to prepare an insoluble immuno-affinity adsorbent, for labelling with a marker of choice.

Working Dilutions:

Non-precipitating antibody-binding techniques: 1/1,000-1/60,000.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

The reagents were evaluated for potency, purity and specificity using most or all of the following techniques: Immunoelectrophoresis, Cross-Immunoelectrophoresis, single Radial Immunodiffusion (Ouchterlony), block titration, ELISA, Immunoblotting and Enzyme Inhibition.

Cross-reactivities against enzymes of other sources may occur but have not been determined.

Species: Candida boidinii.

Other species not tested.

Storage:

Store the antibody lyophilized at 2-8°C and reconstituted at 2-8°C for one week or (in aliquots) at -20°C for longer.

If a slight precipitation occurs upon storage, this should be removed by centrifugation.

Shelf life: one year from despatch.